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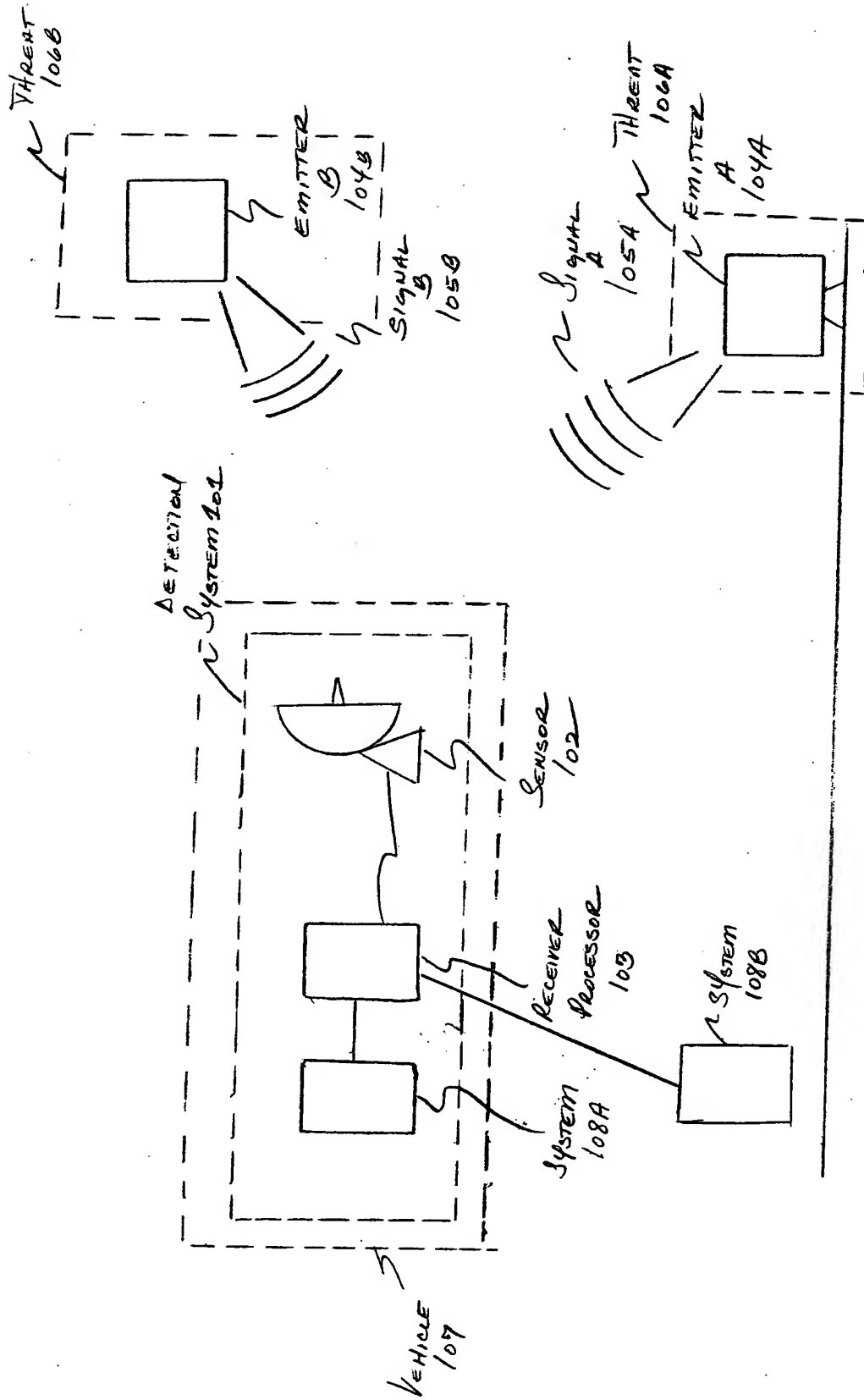


FIGURE 1

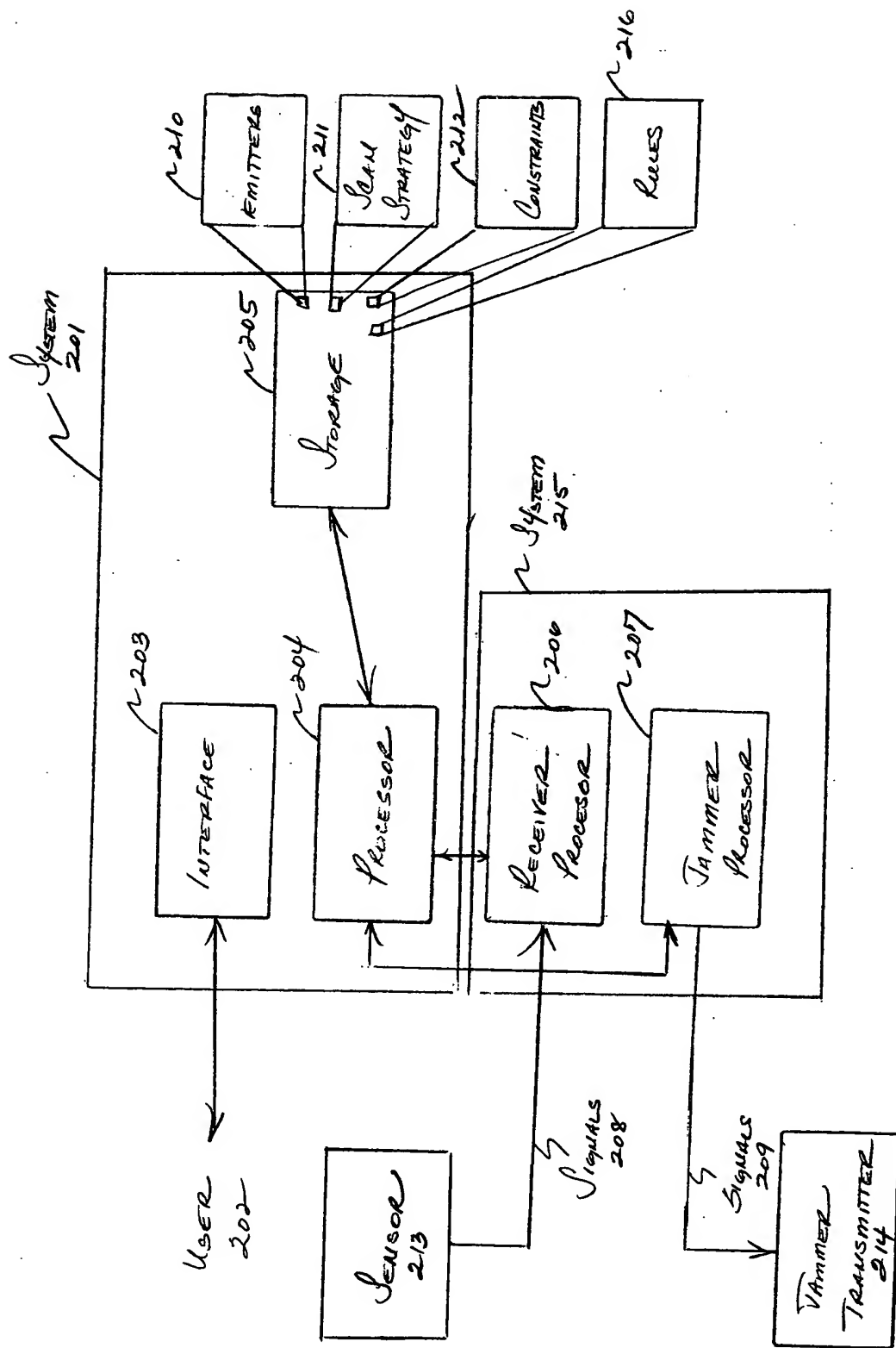
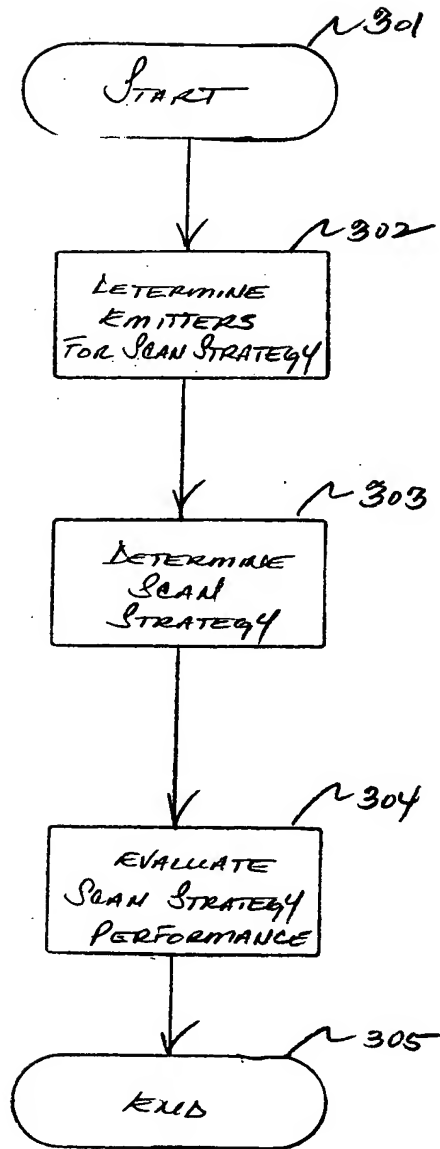


Figure 2



PROCESS
300

FIGURE 3

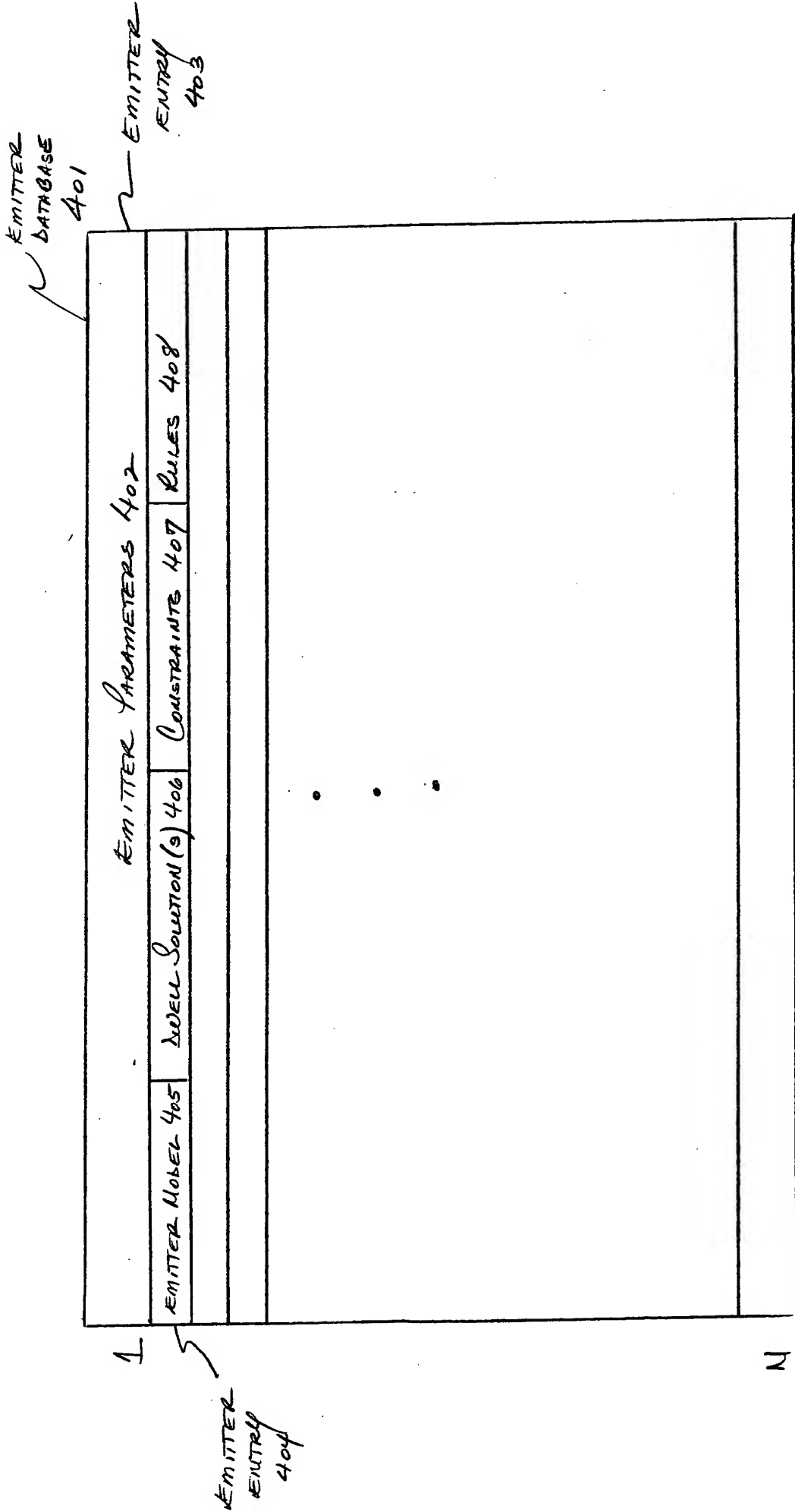


Figure 4

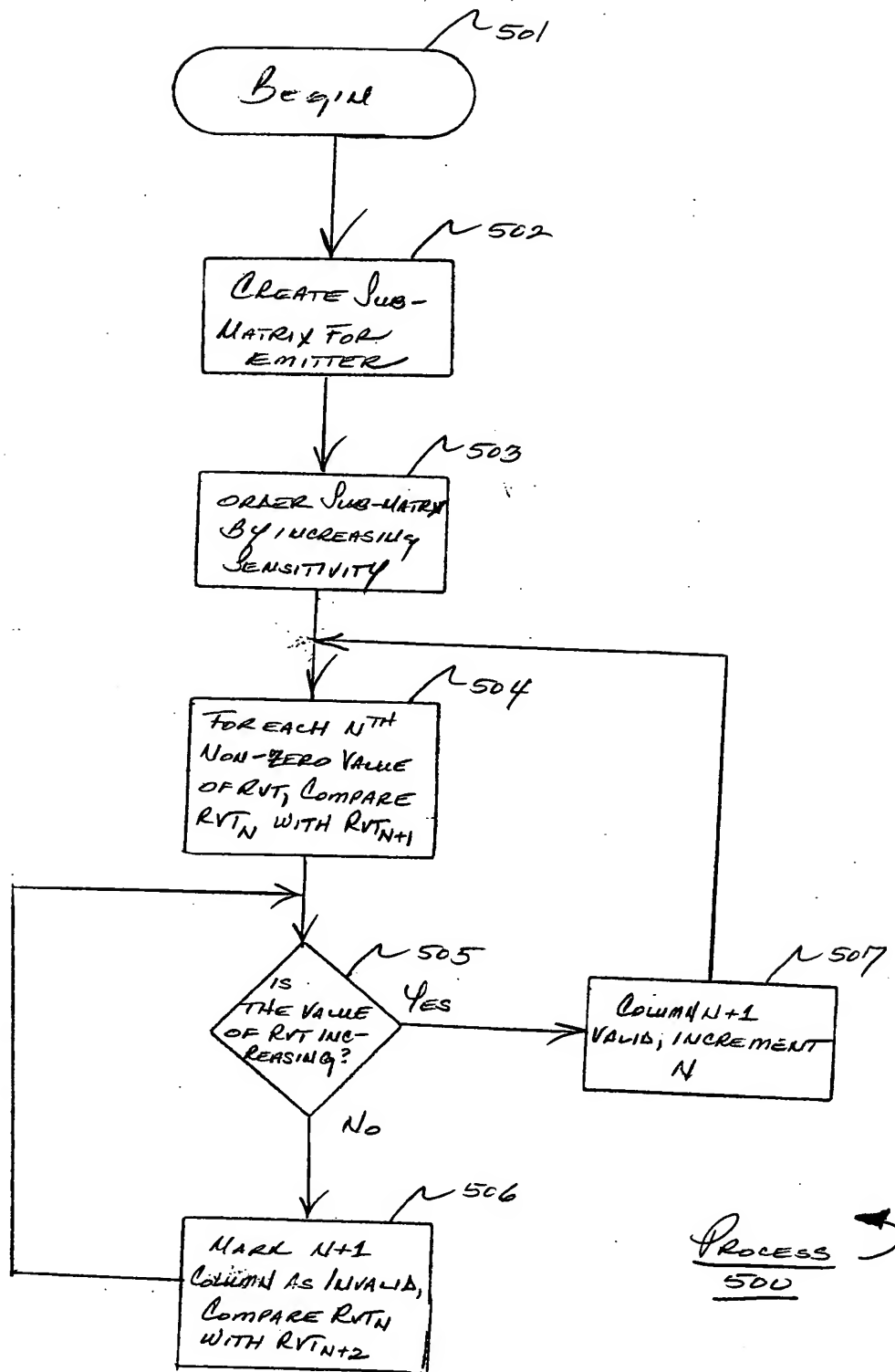


FIGURE 5

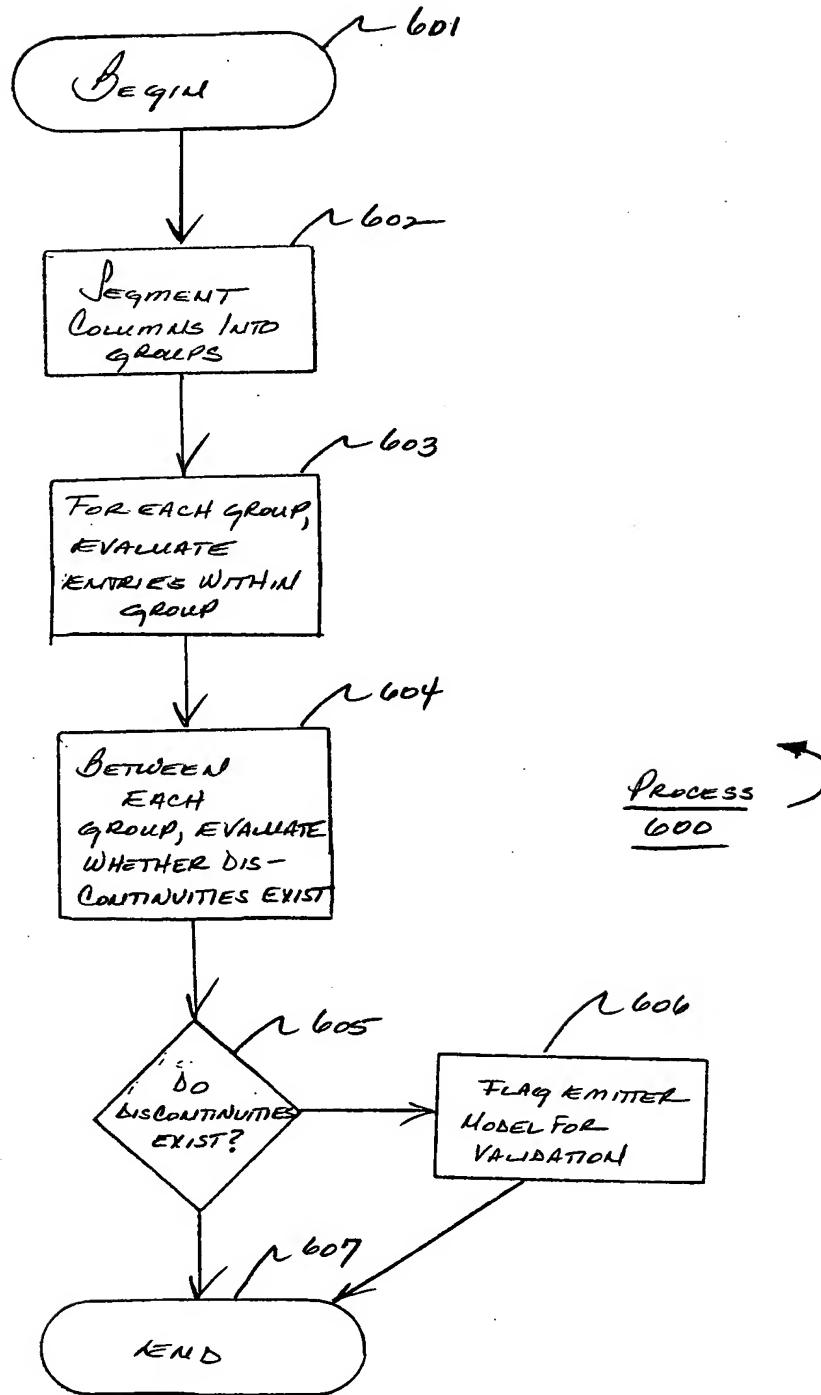


FIGURE 6

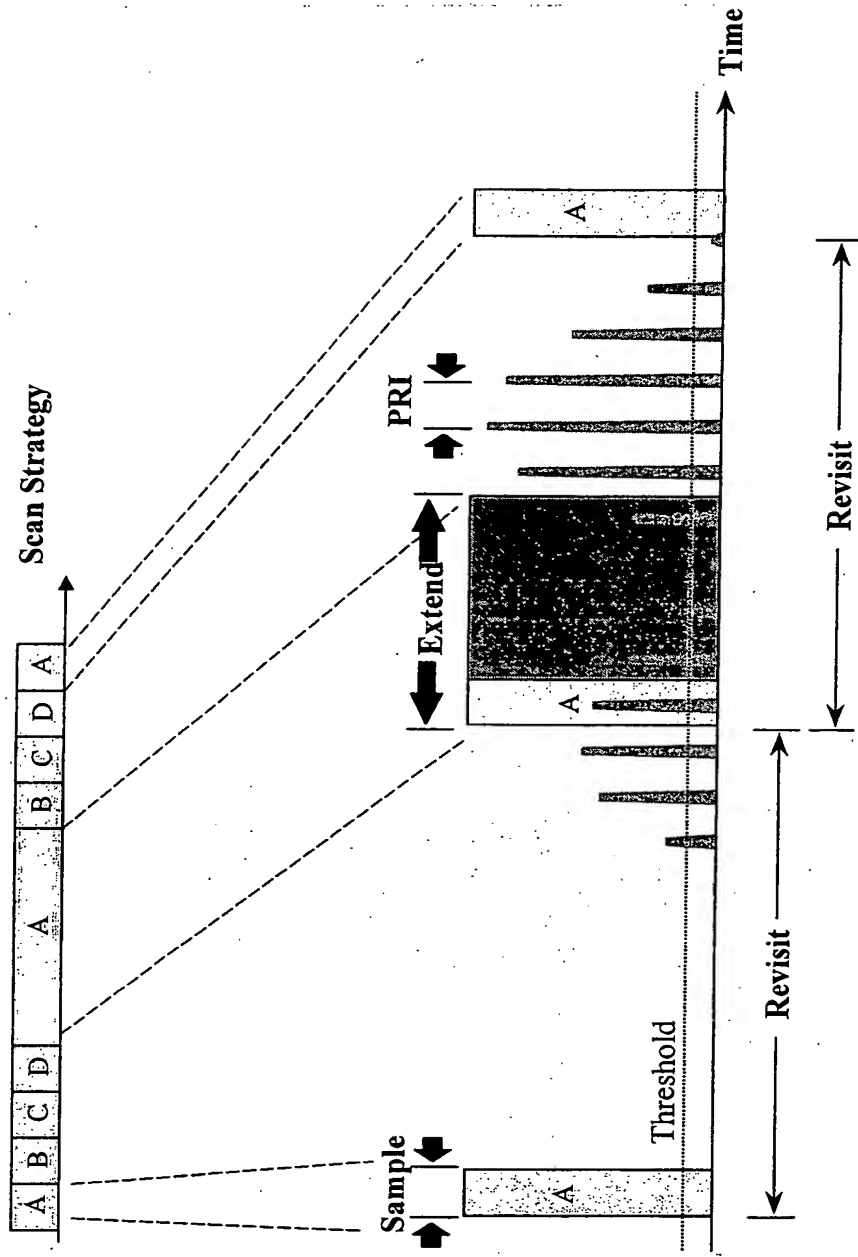


Figure 7

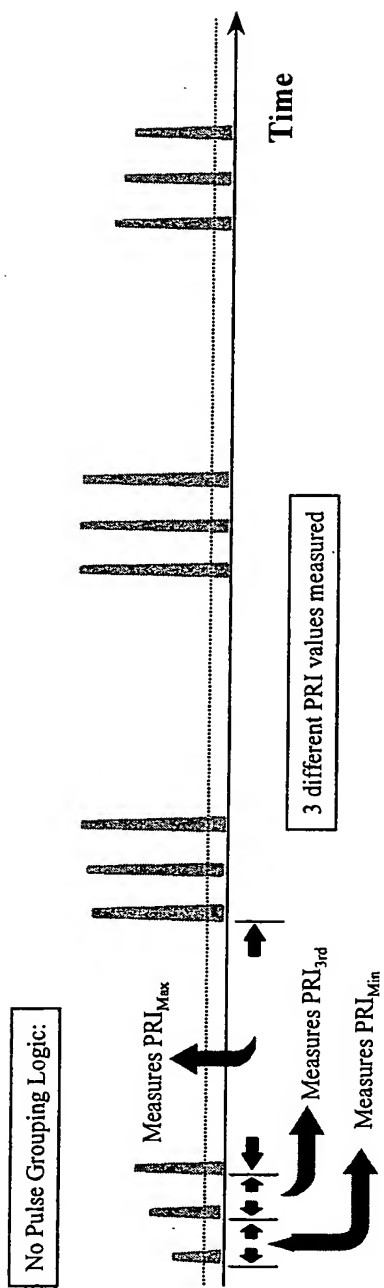


Figure 8A

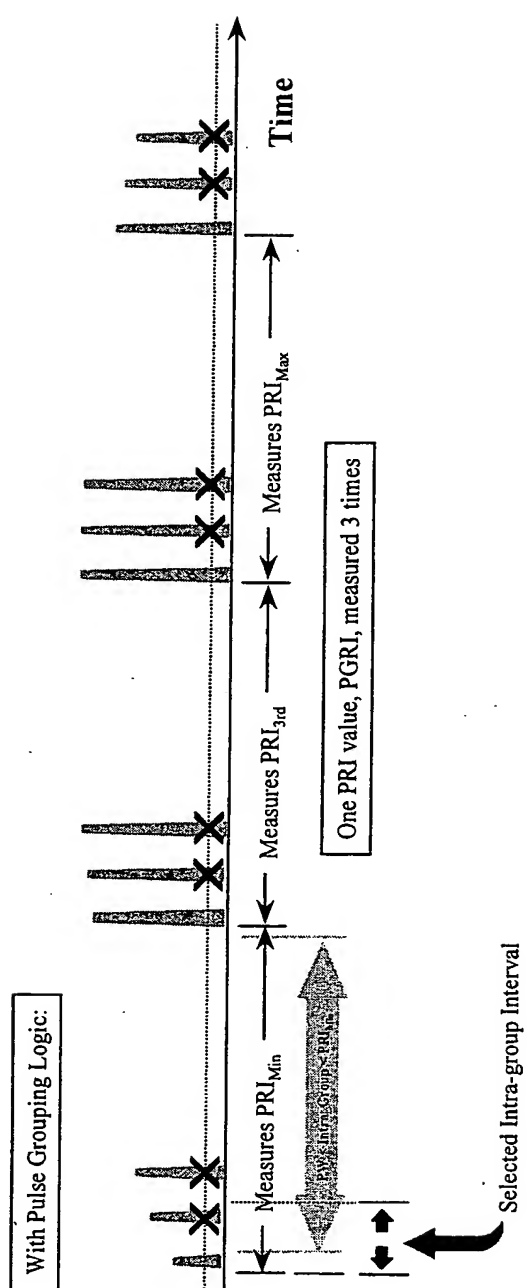


Figure 8B

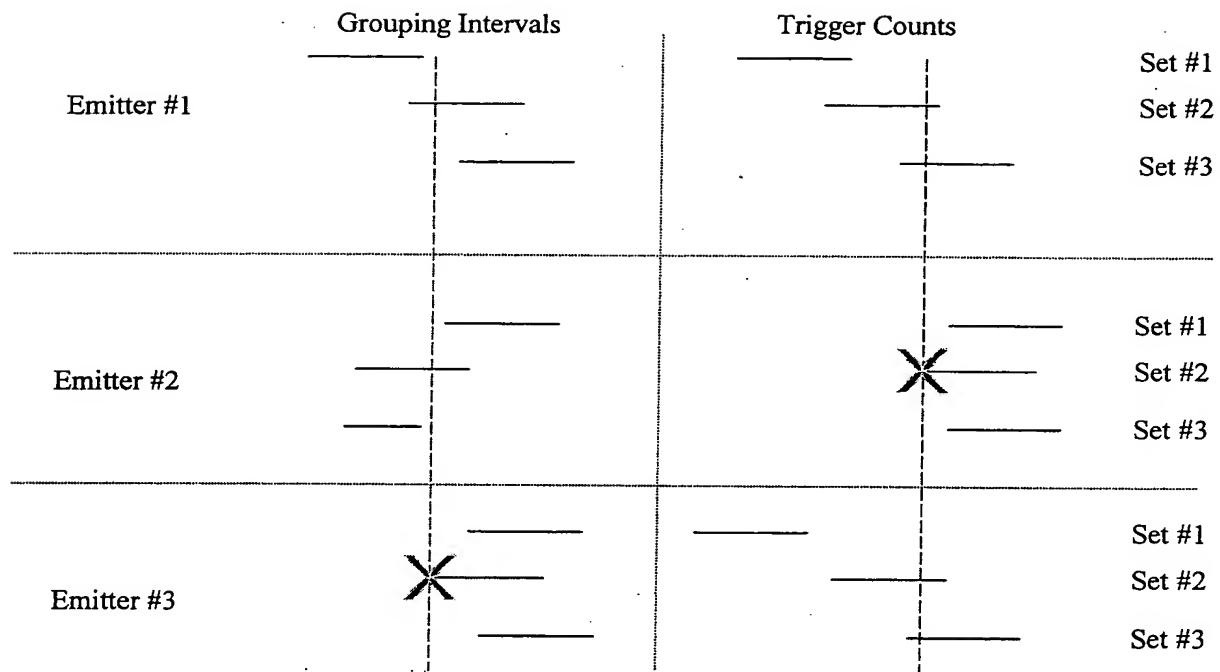
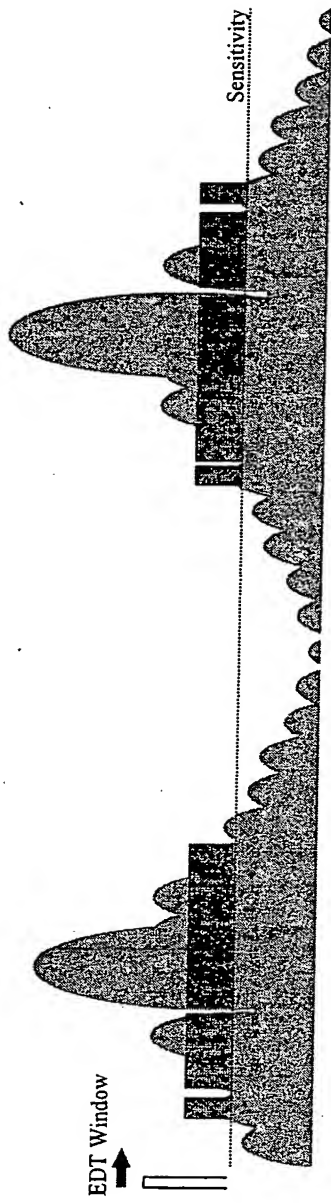


FIGURE 9

Figure
10A



Discrete Illuminations (TIBS)

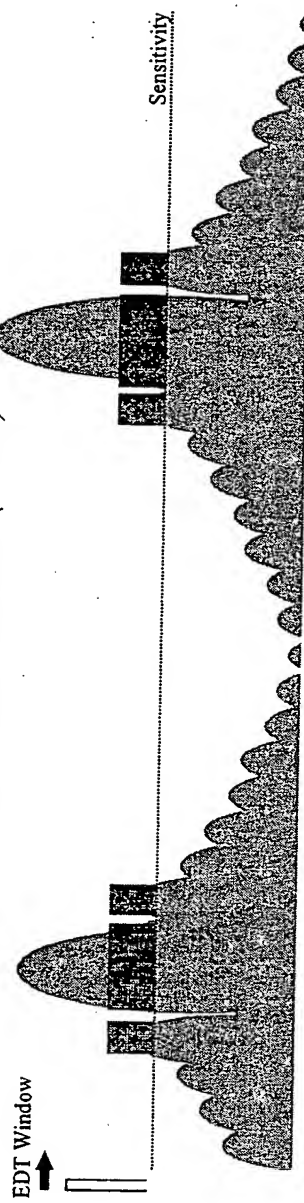


Figure
10B

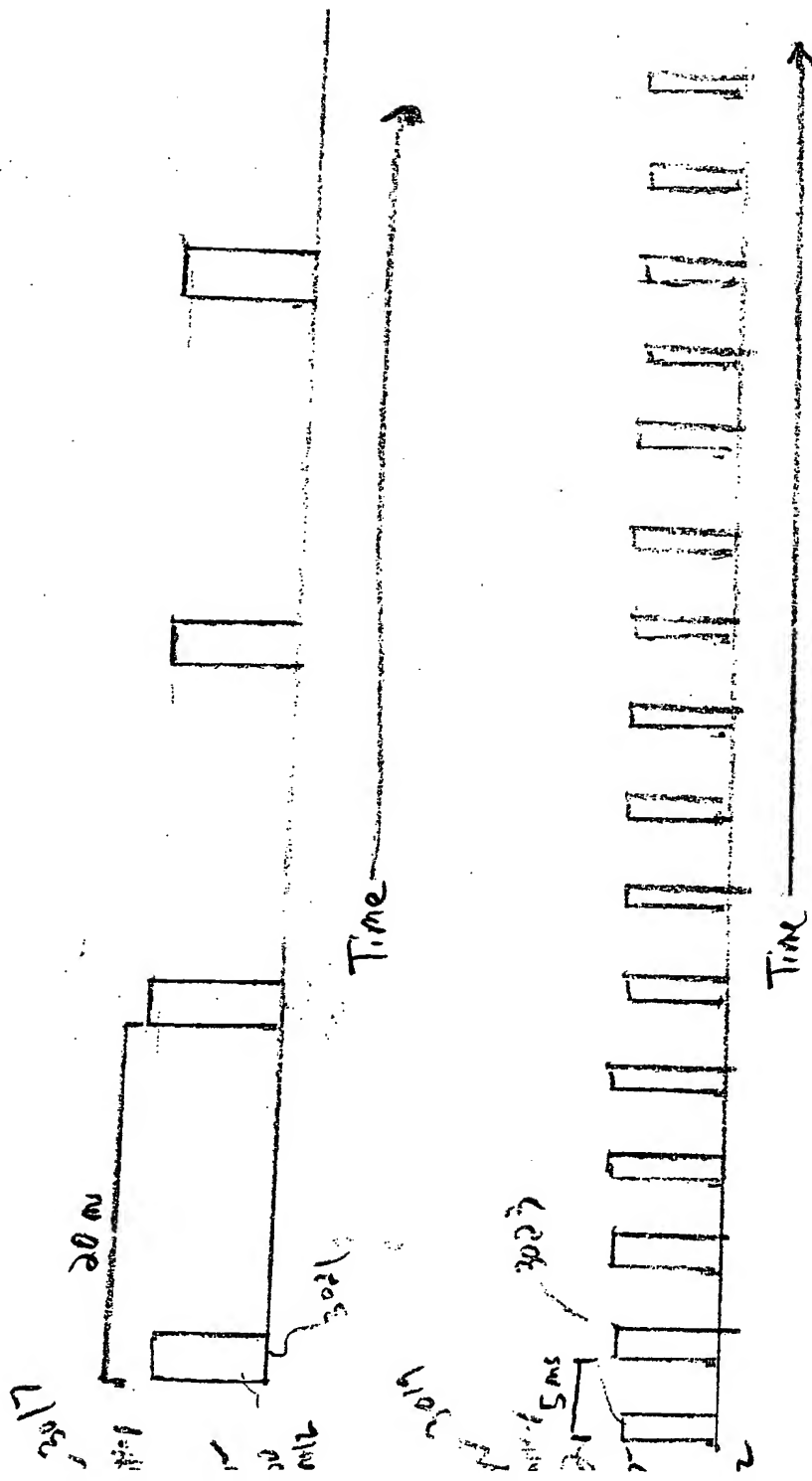
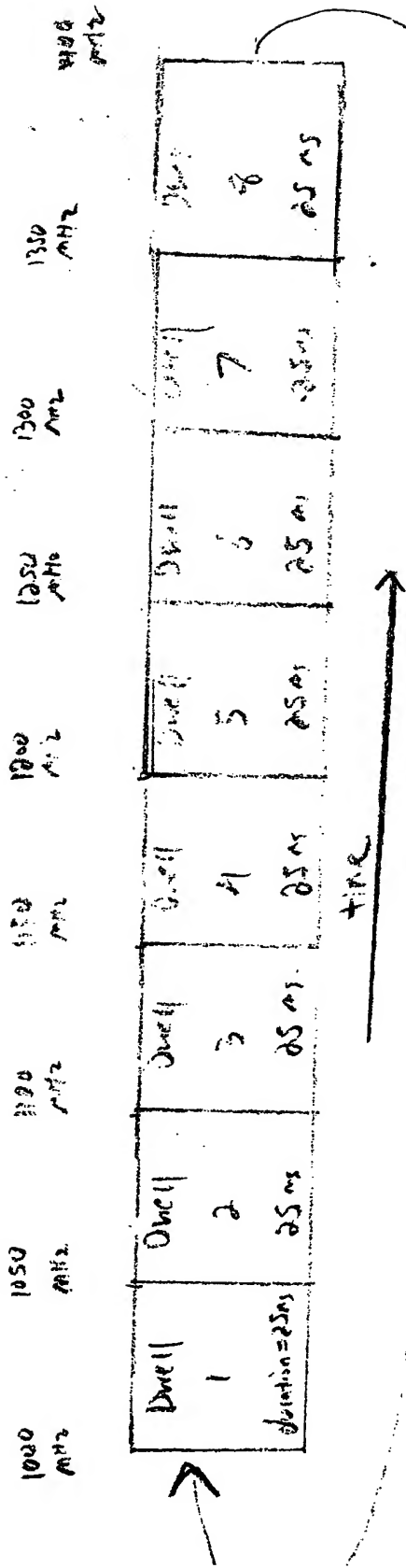
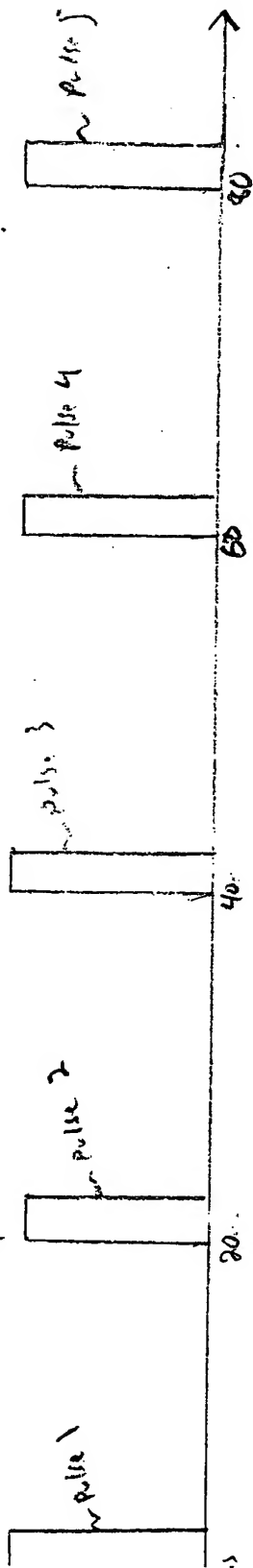
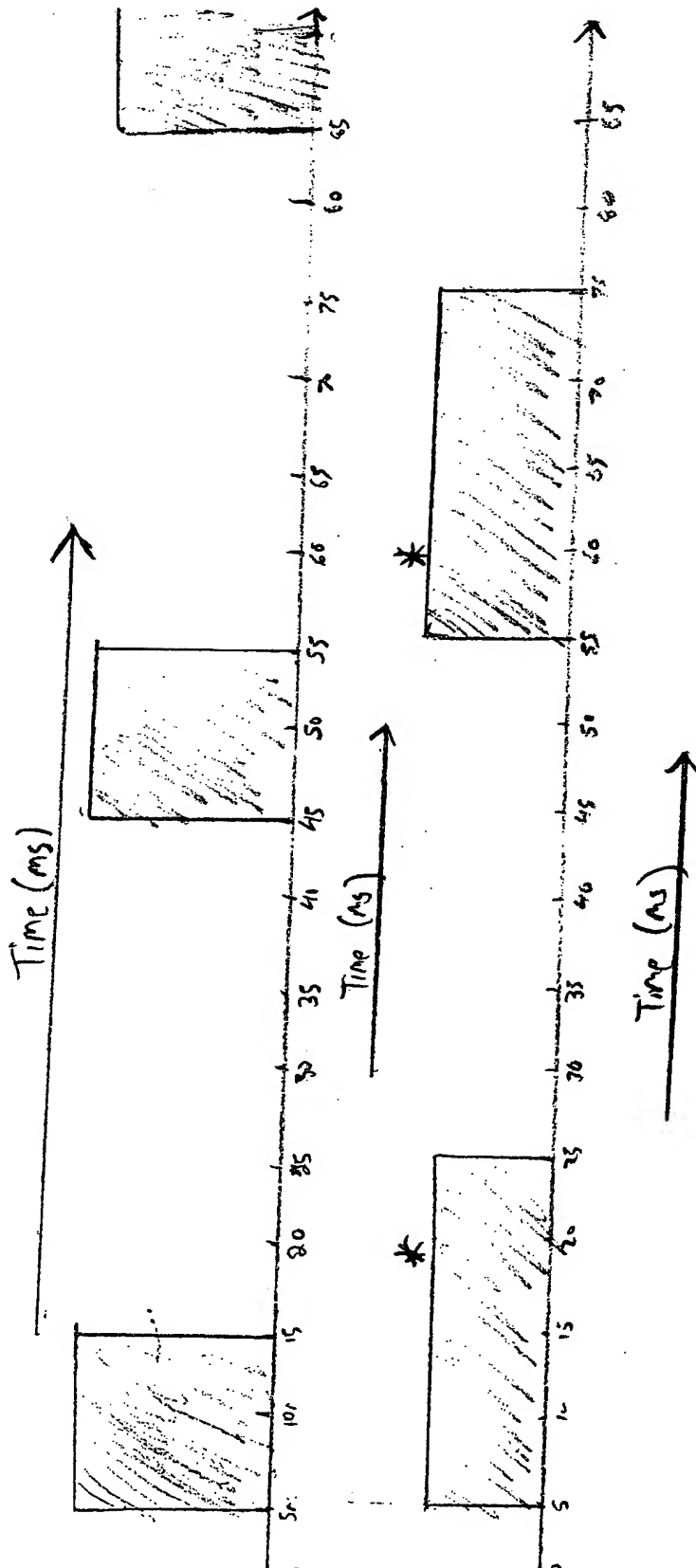


Figure 11

PRI = 20ns



Emitter 3101



Solution 1

Drill Duration = 10ms
Revolt Time = 40ms

Solution 2

Drill Duration = 20ms
Revolt Time = 50ms

Figure 12

4000

Emitter Name	Driving Amp 250 MHz ZF 15 MHz VSW	RV T	Driving Amp 30 MHz ZF 15 MHz VSW	RV T	RF Min (MHz)	RF Max (MHz)	Mod (ms)
E1	100 ns		650 ns		1000	1300	3
E2	120 ns		780 ns		1220	1350	5
E3	110 ns		330 ns		1510	1810	2
E4	130 ns		390 ns		1730	1860	4

Figure B

1000 1250

Dwell 1
 $DD_{max} = 5$
 $RVT_{min} = 100$

Solution 1

$Cost = 5/100 = .05$

1000 1050 1100 1150 1200 1250 1300

Dwell 1	Dwell 2	Dwell 3	Dwell 4	Dwell 5	Dwell 6	Dwell 7	Dwell 8	Dwell 9
DD_{max} 3	DD_{max} 3	DD_{max} 3	DD_{max} 3	DD_{max} 3	DD_{max} 3	DD_{max} 3	DD_{max} 5	DD_{max} 5
RVT_{min} 650	RVT_{min} 650	RVT_{min} 650	RVT_{min} 650	RVT_{min} 650	RVT_{min} 650	RVT_{min} 650	RVT_{min} 650	RVT_{min} 650

Cost $3/650 + 3/650 + 3/650 + 3/650 + 3/650 + 3/650 + 3/650 + 5/650 + 5/650 = 31/650 \approx .048$

Solution 2

Total
 31/650

Figure 14A

1510

1760

<p>Dwell 1</p> <p>DDmax = 4 ms</p> <p>RVTime = 330 ms</p>

Solution 1

$$\text{Cost} = \frac{4}{330} = .012$$

1510 1540 1570 1600 1630 1660 1690 1720 1750 1780

Dwell 1	Dwell 2	Dwell 3	Dwell 4	Dwell 5	Dwell 6	Dwell 7	Dwell 8	Dwell 9
DDmax 2	DDmax 2	DDmax 2	DDmax 2	DDmax 2	DDmax 2	DDmax 2	DDmax 4	DDmax 4
RVTime 330 ms	RVTime 330 ms	RVTime 330 ms	RVTime 330 ms	RVTime 330 ms	RVTime 330 ms	RVTime 330 ms	RVTime 330 ms	RVTime 330 ms

$$\text{Cost} = \frac{2}{330} + \frac{2}{330} + \frac{2}{330} + \frac{2}{330} + \frac{2}{330} + \frac{2}{330} + \frac{2}{330} + \frac{4}{330} + \frac{4}{330} = \frac{20}{330} = .06$$

Solution 2

Figure 14B

Figure 15

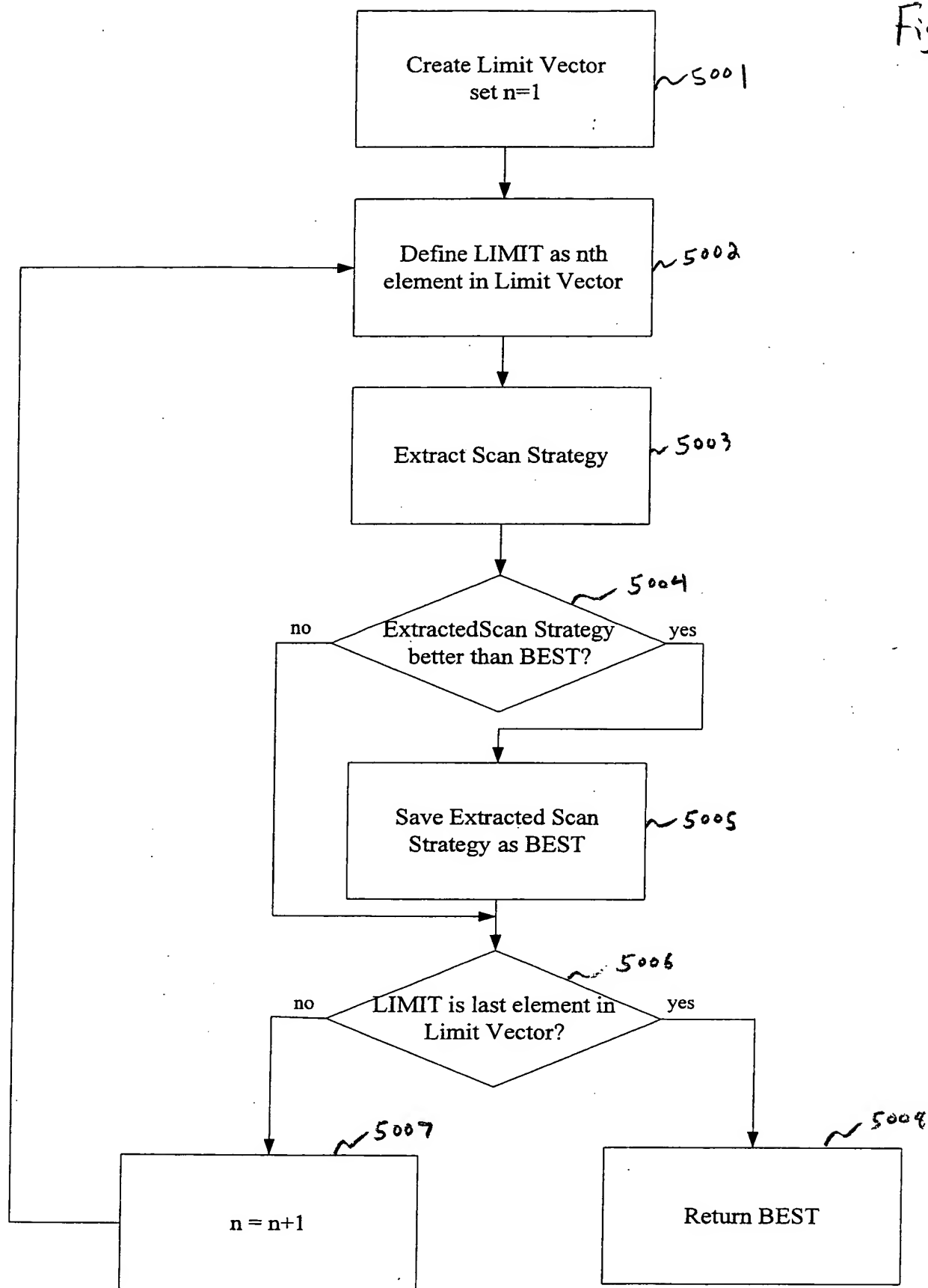
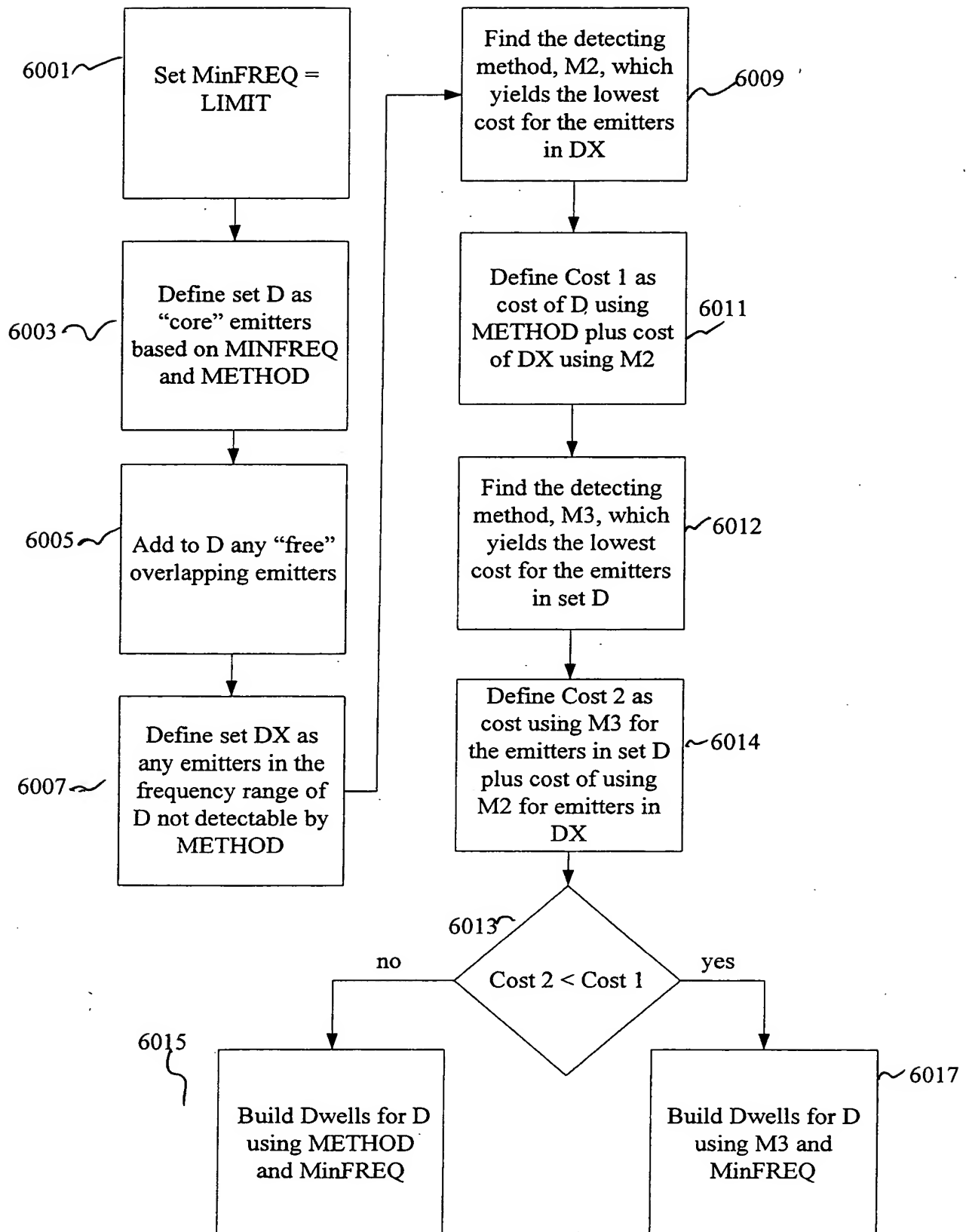


Figure 16



Name	RF Min	RF Max
E1	1100	1200
E2	1150	1250

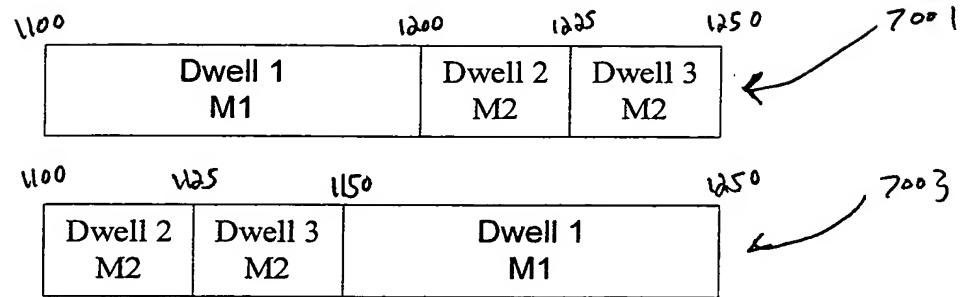
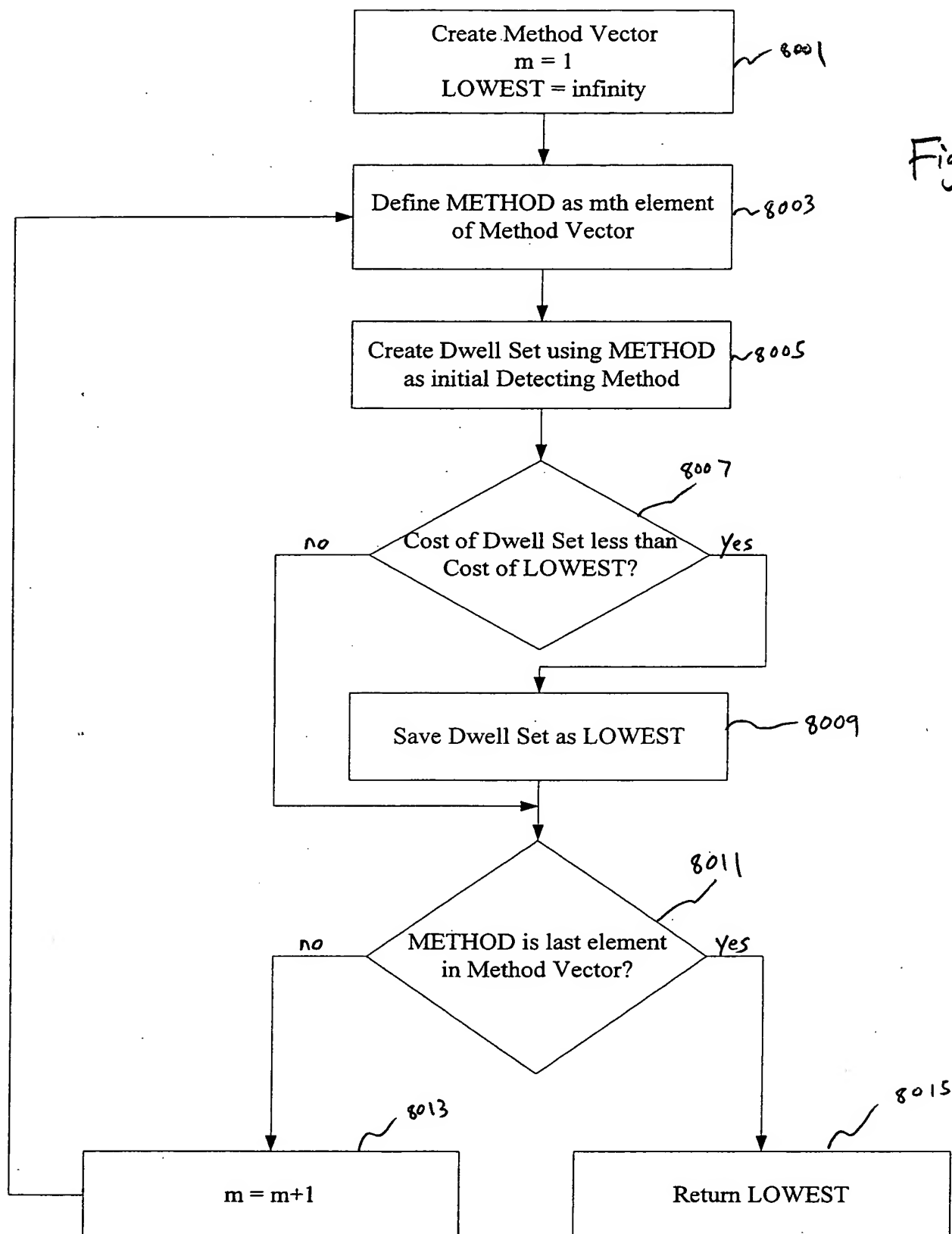


Figure 17

Figure 18



Emitter	Dwell Duration (ms)	Revisit Time (ms)
Emitter 1	1	500
Emitter 2	2	1200

Figure 19

Emitter	Dwell Duration (ms)	Revisit Time (ms)	Cost
Emitter 1	1	500	.002
Emitter 2	5	1000	.005

Figure 20

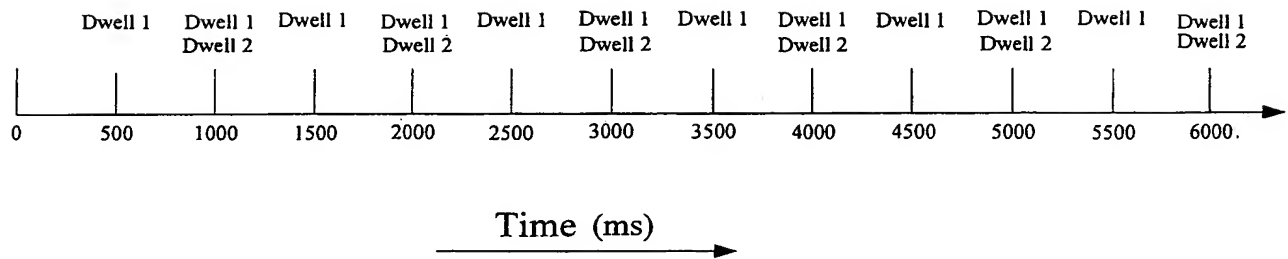


Figure 21

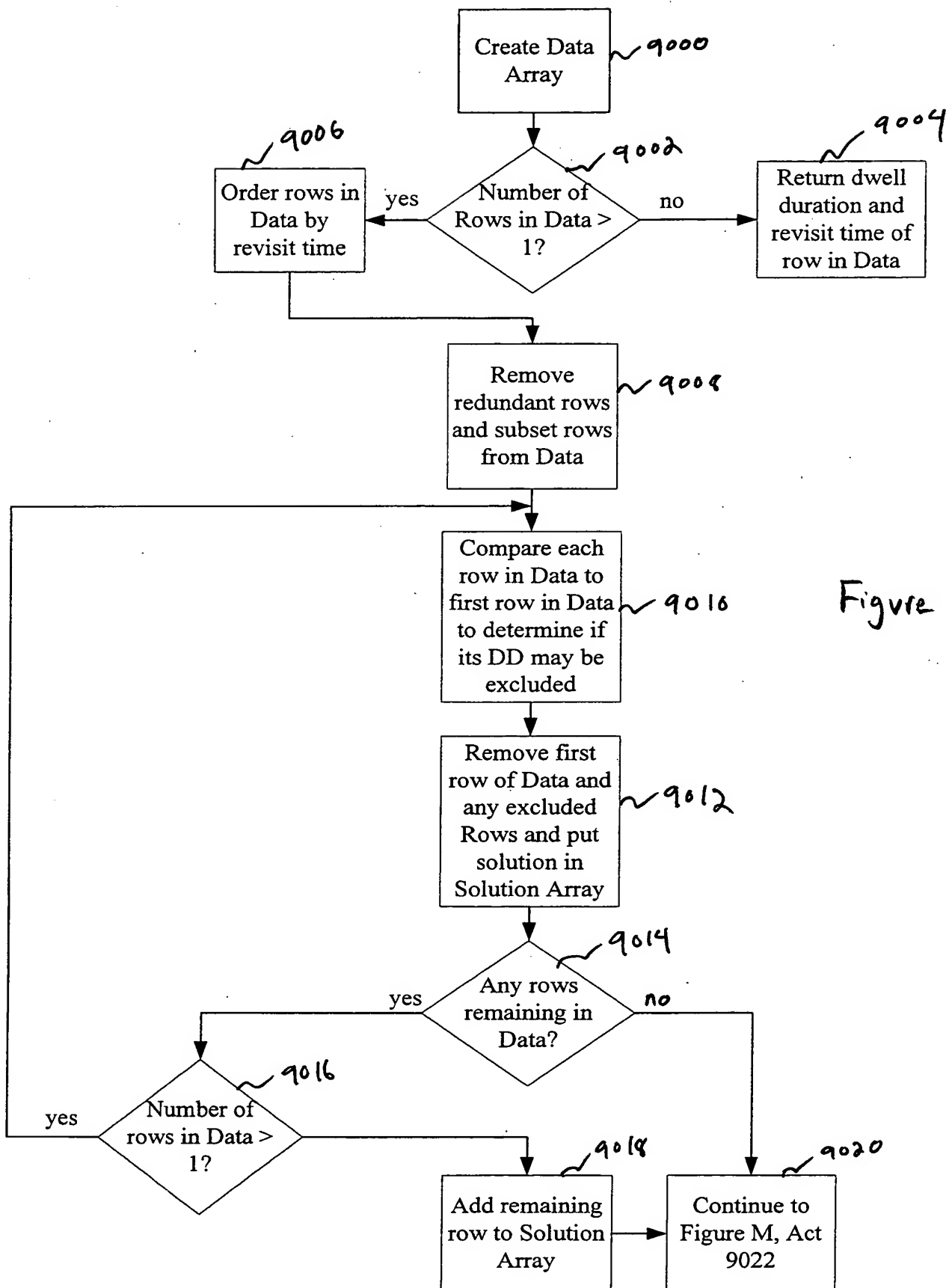


Figure 22

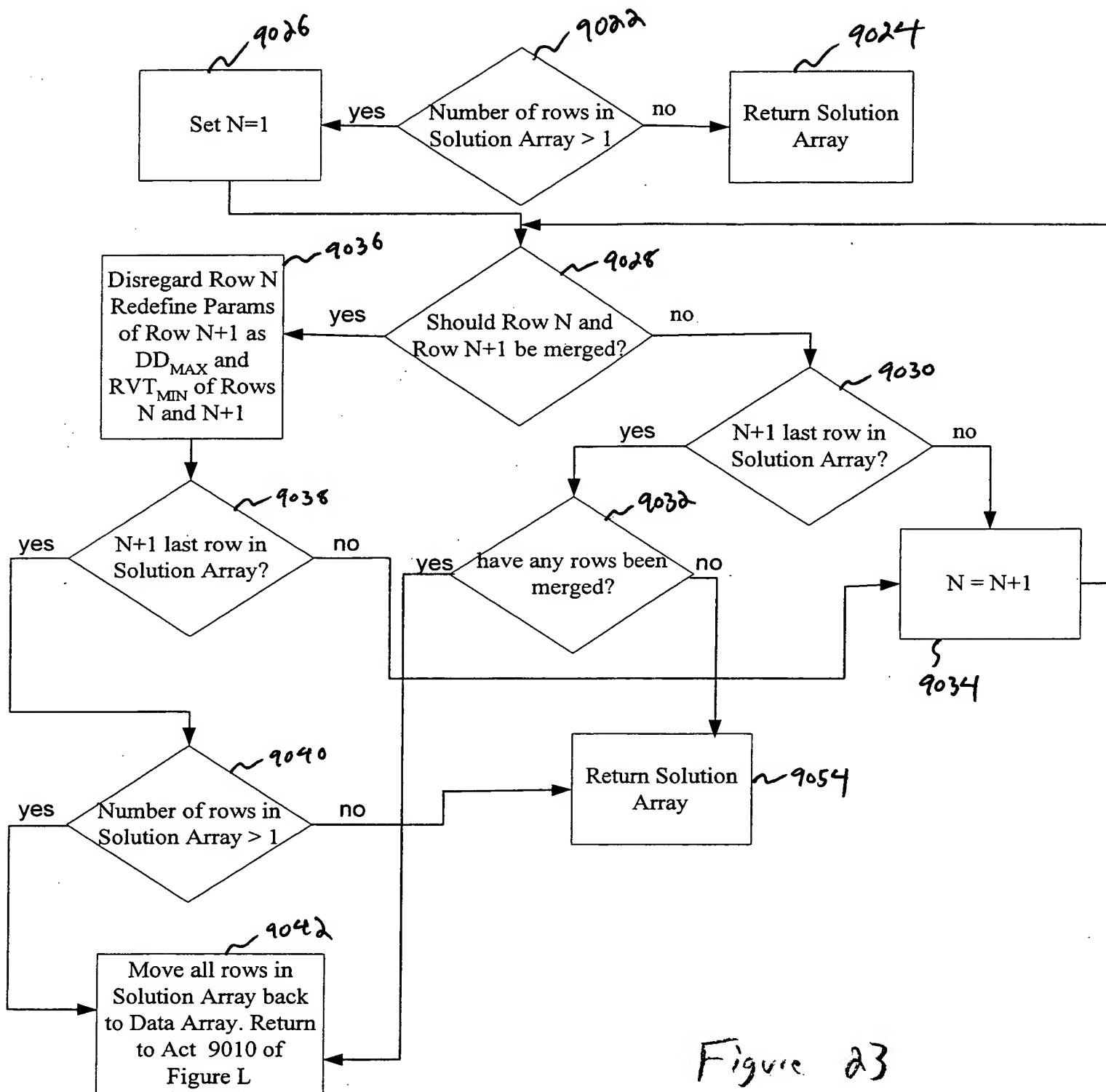


Figure 23

9044

Data		
MDT	EDT	RVT
3.05	17	2868
3	19	2000
3	19	2000
1	7	500
2	9	700
2.3	11	800
0.5	3.5	1000

Figure 24A

9044

Data		
MDT	EDT	RVT
1	7	500
2	9	700
2.3	11	800
0.5	3.5	1000
3	19	2000
3	19	2000
3.05	17	2868

9048
9049
9050

Figure 24B

9051
9052

Data		
MDT	EDT	RVT
1	7	500
2	9	700
2.3	11	800
3	19	2000
3.05	17	2868

Figure 24C

9044

Data		
MDT	EDT	RVT
2	9	700
2.3	11	800

9046

Solution		
MDT	EDT	RVT
1	19	500

Figure 24D

9044

Data		
MDT	EDT	RVT

9046

Solution		
MDT	EDT	RVT
1	19	500
2	11	700

Figure 24E

9046

Solution		
MDT	EDT	RVT
1	19	500
2	11	700

Figure 24F

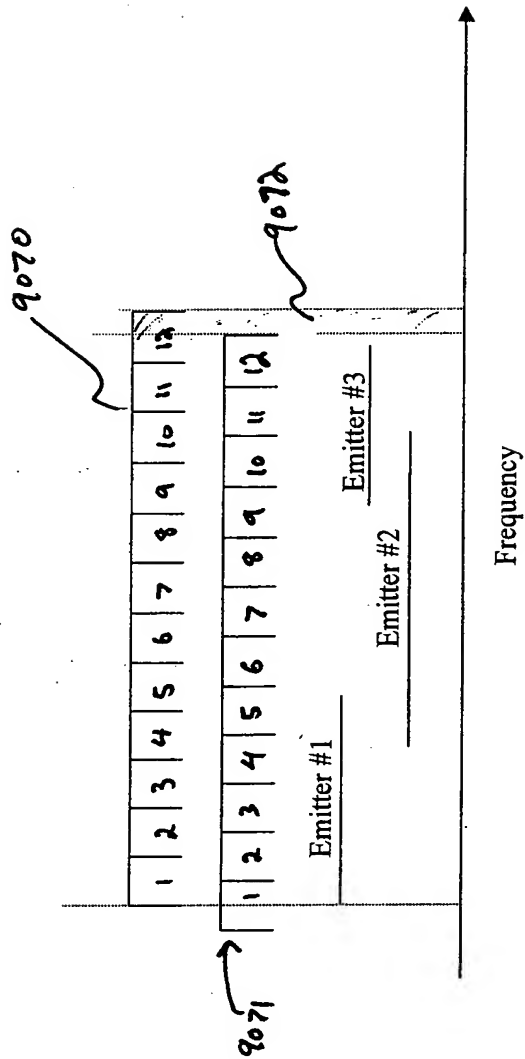


Figure 25

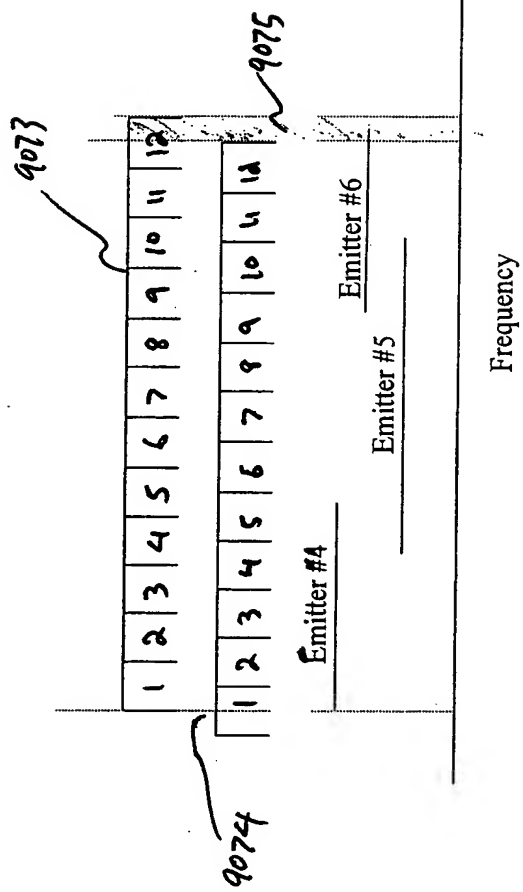


Figure 26

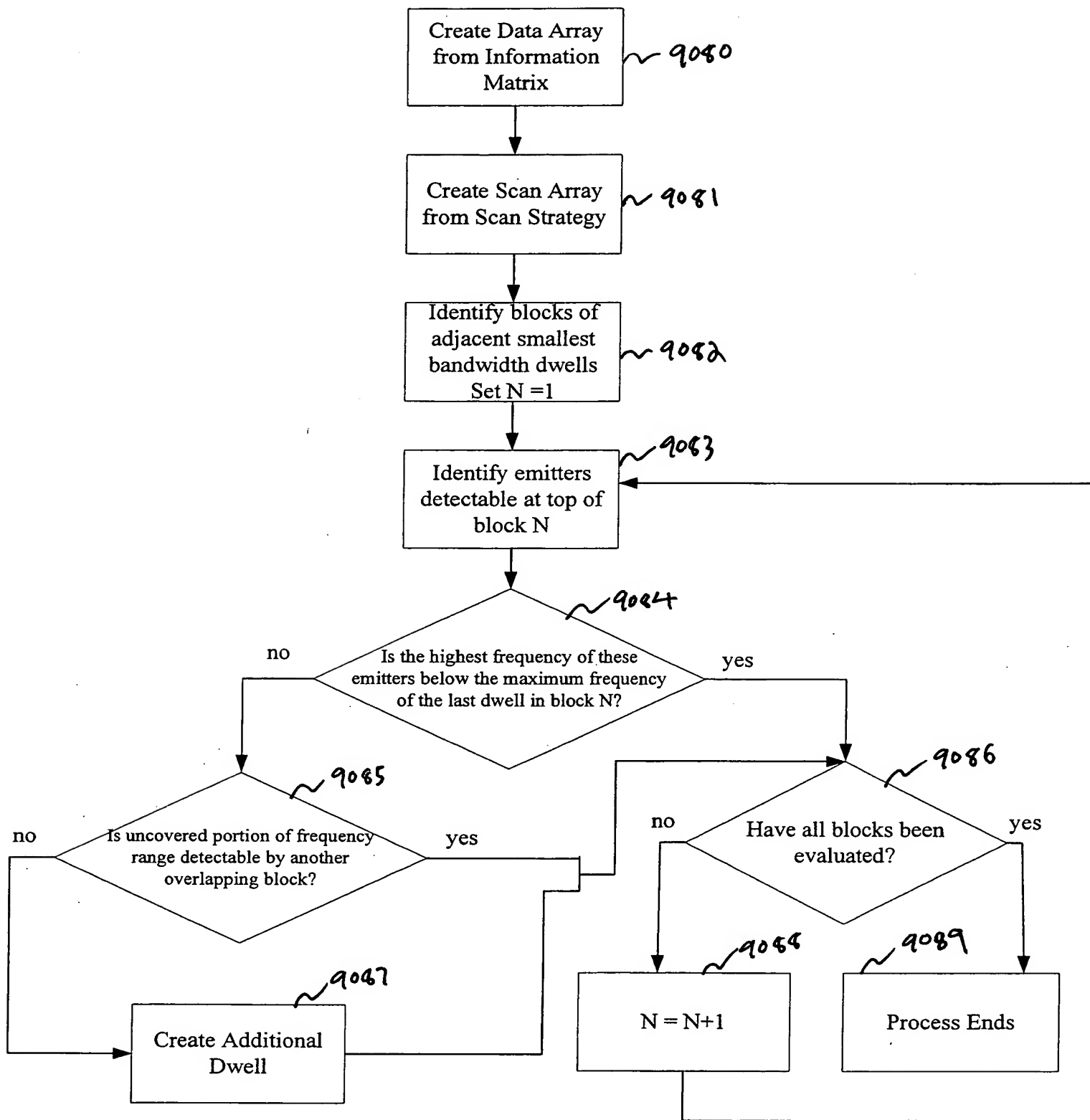


Figure 27

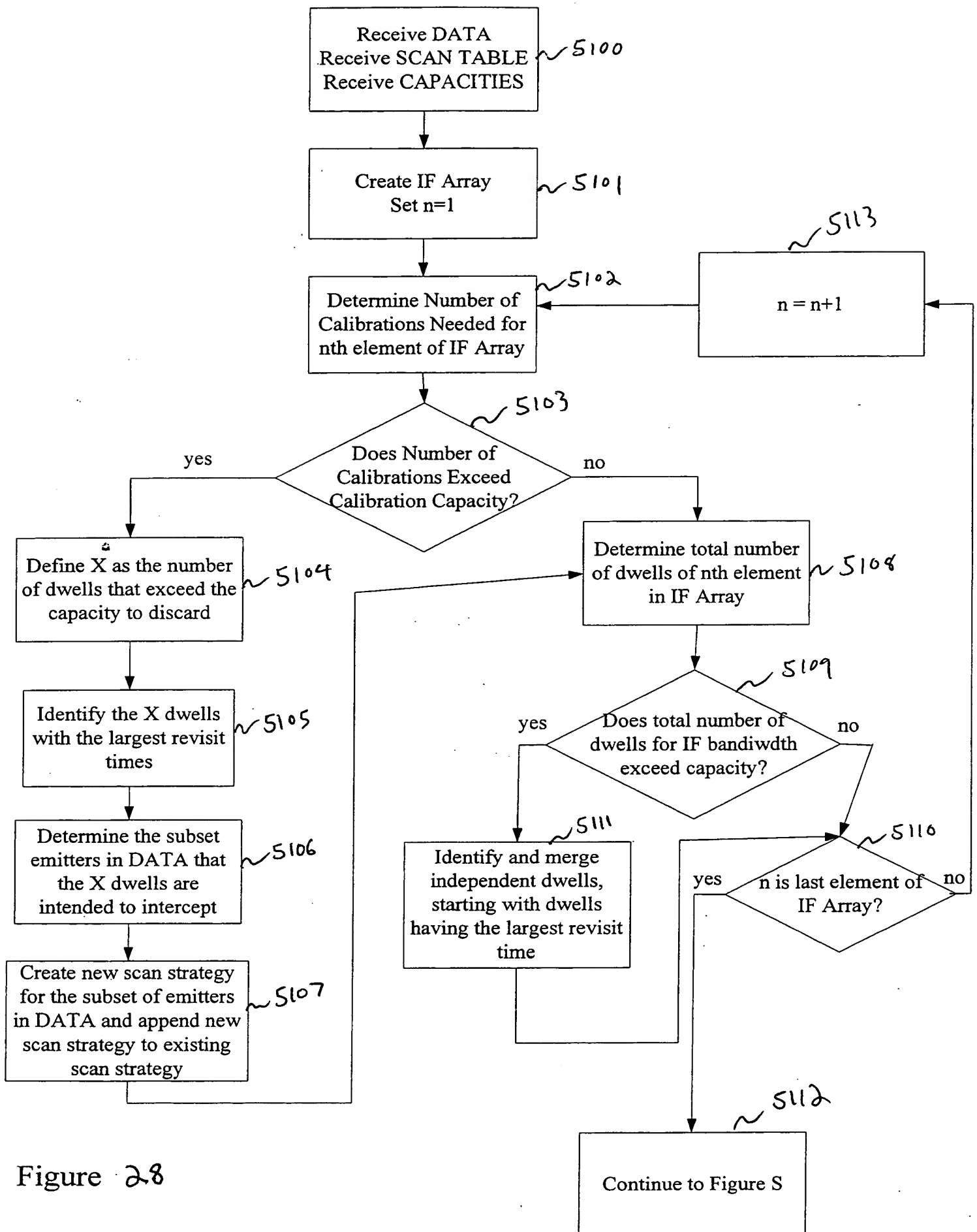


Figure 28

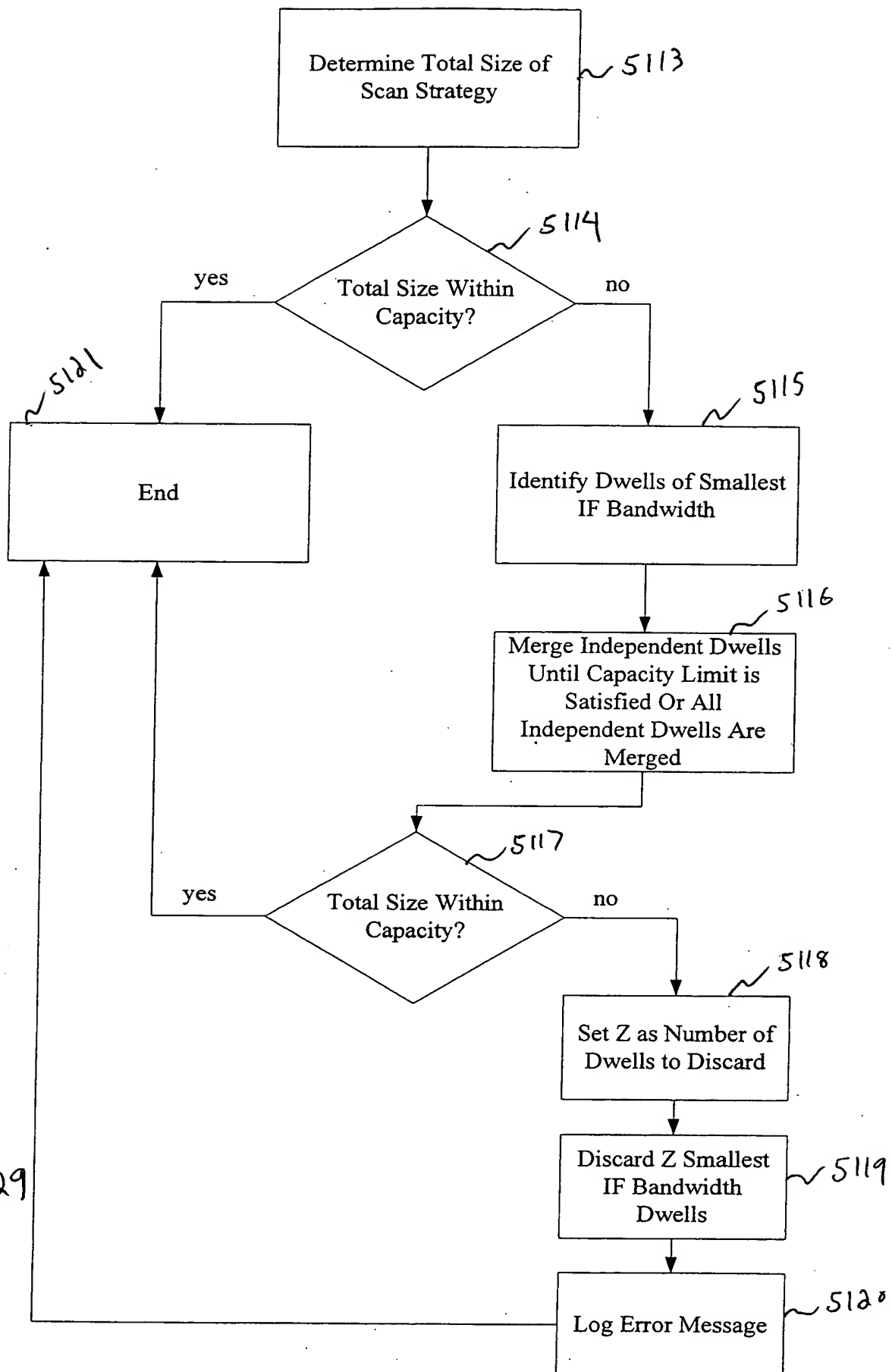


Figure 29

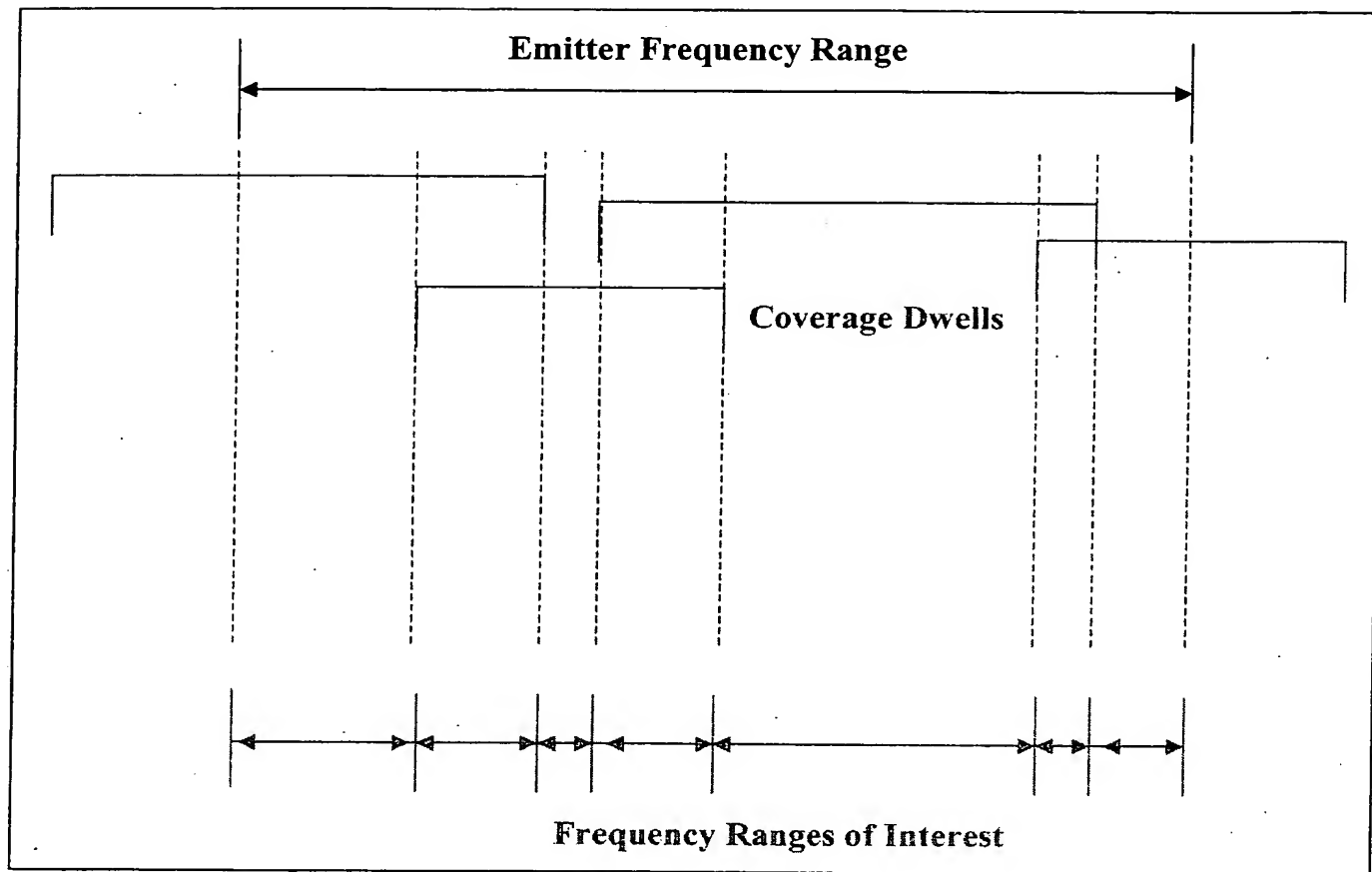


Figure 30

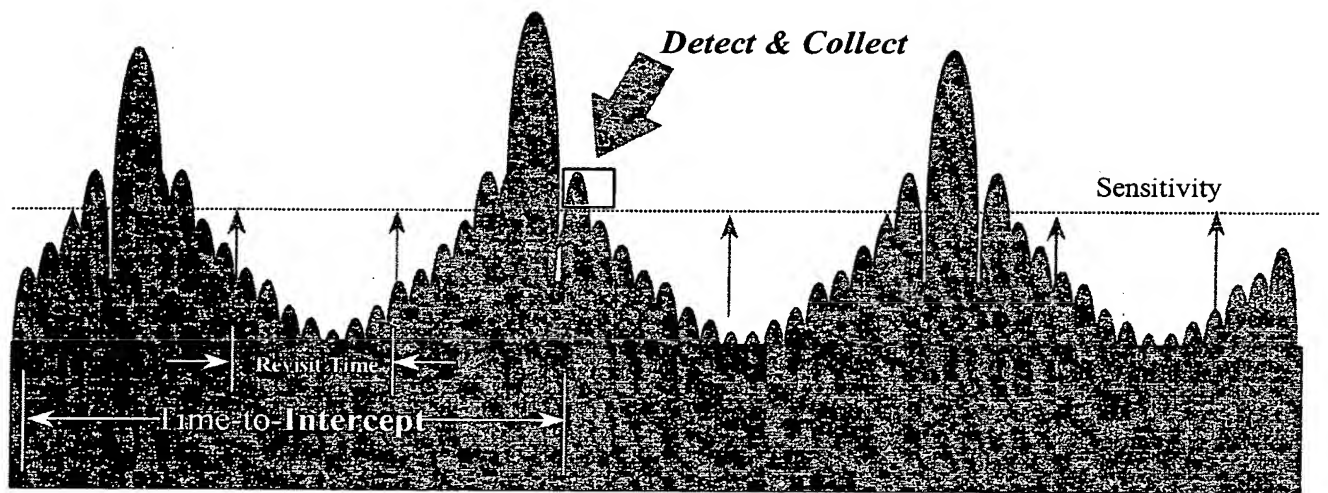


Figure 31

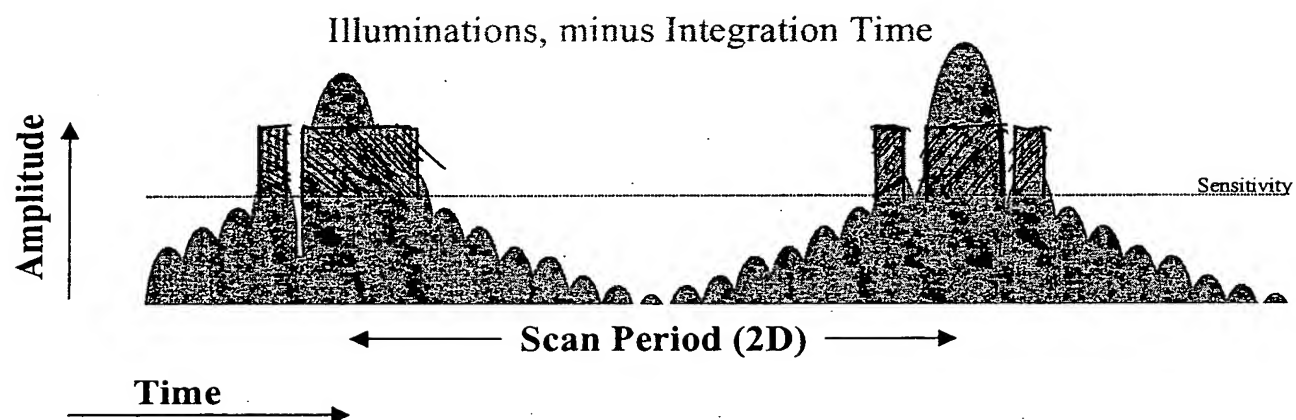


Figure 3d